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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,028	09/05/2003	Paul L. Camwell	A891743US	6038
37047 7590 07/14/2008 GOWLING LAFLEUR HENDERSON LLP SUITE 1400, 700 2ND ST. SW CALGARY, AB T2P 4V5 CANADA				
EXAMINER CAVALLARI, DANIEL J				
ART UNIT		PAPER NUMBER		
2836				
MAIL DATE		DELIVERY MODE		
07/14/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/655,028

Applicant(s)

CAMWELL ET AL.

Examiner

DANIEL CAVALLARI

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-16 is/are allowed.
- 6) ☒ Claim(s) 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/28/2008 has been entered. Amendments to claim 18 and cancellation of claim 19 and 20 is accepted.

Response to Arguments

Applicant's arguments with respect to claim 18 have been considered but are moot in view of the new ground(s) of rejection. The Examiner notes that although the same prior art was used in the rejection; it has been applied in a slightly different manner, as disclosed below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahasi (US 6,192,435) and Wood (US 5,726,506).

Takahasi teaches:

A multi-conductor plug (30) and socket (20) means arrangement (See Figure 2) said plug and socket means sharing a common axis (See Figure 2 and note how the male and female sockets align forming a common axis), said plug means (30) having a plurality of plug contacts thereon, adapted for insertion in said socket means (20), said socket means having a plurality of socket contacts disposed thereon corresponding to said plug contacts (read on by the two topmost plug/socket contacts, figure 2) (See Column 4, Line 65 to Column 5, Line 9), comprising:

- A first plug (30) contact (topmost) of said plug contacts electrically coupled to a first simple electronic device (read on by the wiring connecting the wire connecting the plug to the line Vi) and at least one other electrical contact (second from the topmost contact) electrically coupled to an isolation means, read on by switch (SW1) regardless of whether the plug and socket means are engaged or disengaged.
- A first socket (20) contact (read on by the bottom most contact on the socket side (20) connected to SG, figure 2) electrically coupled to a second simple electronic device (read on by the wiring connecting the wire connecting the plug to the line Vi when the plug and socket are connected), and at least one other socket contact (read on by the bottom most contact on the plug side (30), see figure 2) electronically coupled to an electronic isolation means, read on by switch (10) regardless of whether the plug and socket means are engaged or disengaged).
- The plug isolation means (SW1) activated only when the second simple electronic device is detected by the full engagement of the plug and socket so as to then permit electrical current to flow to and/or from said at least one other plug contact thereon (see column 9, lines 53-67).

- The socket isolation means (10) activated only when the second simple electronic device is detected by full engagement permitting current flow from the contacts which is activated upon full engagement of the plug and socket arrangement (See Column 4, Lines 43-50 & Column 7, Line 56 to Column 8, Line 58).

Takahasi fails to teach wherein the simple electronic device above is a diode isolating the plug and socket via diodes. However, Wood teaches a connector arrangement in which the power supply (PS) and load side (LOAD) comprise protective diodes (See Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate power supply side (socket side) and load side (plug side) diodes on the power supply line and load lines of the plug and socket connector as taught by Takahasi (See Figure 2 & See Column 4, Lines 43-50 & Column 7, Line 56 to Column 8, Line 58). The motivation would have been to protect the circuits against reverse current (See Column 4, Lines 54-64).

Allowable Subject Matter

Claims 6-16 are allowed for reasons indicated in the Office Action of 1/22/2007.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Cavallari whose telephone number is 571-272-8541. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel Cavallari/

July 10, 2008

/Stephen W Jackson/
Primary Examiner, Art Unit 2836